

antenna performance

Nov 28. 2025

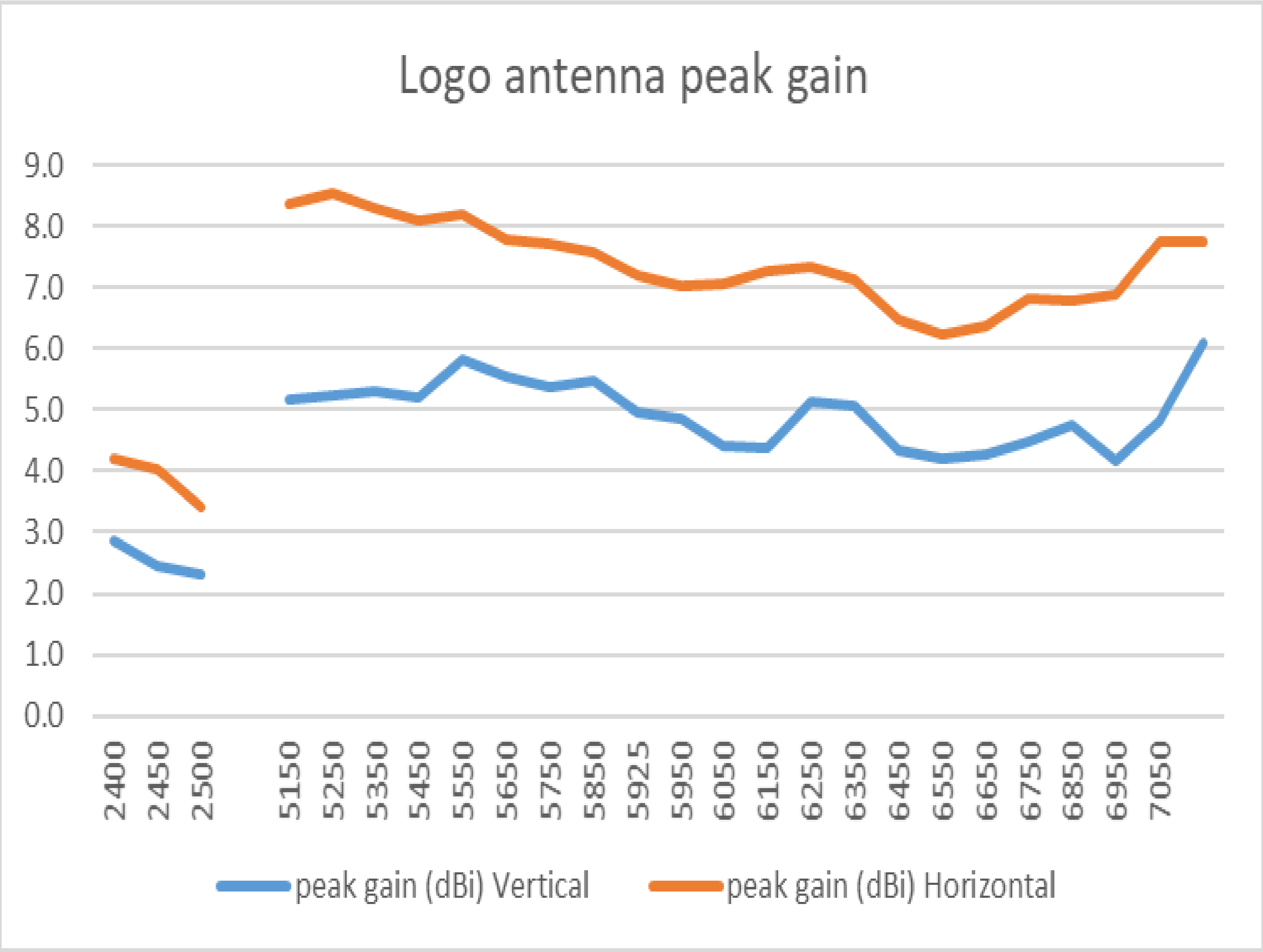
Report date	Report contents
2024.11.11	Antenna DFM and proposal
2024.11.14	Initial antenna performance
2024.11.19	Update DOE1 study data: increase 5mm for bezel antenna
2024.11.26	Update display material setting and antenna performance for original condition and Design1
2024.11.29	Update antenna performance for Design1 with combined DOEs
2024.12.04	Update antenna performance for Design2 with combined DOEs
2024.12.06	Update top slot and bottom slot antenna performance
2024.12.10	Update two top slot antenna performance
2024.12.12	Update antenna patterns and add a new antenna option
2024.12.13	Update top IFA performance
2024.12.17	Update top and bottom IFA antenna performance
2024.12.27	Update top, logo and bottom simulation antenna performance based on new drawing and handmade mockup device
2025.01.07	Update top, logo and bottom antenna performance based on the handmade mockup device
2025.01.15	Update logo and bottom antenna performance based on the CNC mockup
2025.01.17	Update the top bezel antenna
2025.01.22	Optimize bottom antenna and study logo antenna
2025.01.23	Update DOE for bottom antenna
2025.01.27	Optimized Logo and bottom antenna performance
2025.02.08	Optimize logo and bottom antenna performance and update the simulation study
2025.02.20	Sample testing data and study of attaching bottom to back cover
2025.02.26	Update Logo antenna location and display grounding study
2025.02.28	Update foam dimension and Logo antenna study
2025.03.12	Update bottom and logo antenna performance
2025.03.19	Update bottom antenna performance
2025.03.28	Update radiation pattern

Report date	Report contents
2025.04.08	Study of adding copper tape on the display for grounding back cover
2025.04.29	Study of new display grounding method
2025.07.03	Original antenna performance in EVT device
2025.07.10	Cable study in EVT device
2025.07.16	Optimize antenna performance based on the EVT device
2025.07.23	Optimize antenna when cable no grounding and change bottom antenna pattern study
2025.07.25	Change logo cable route
2025.07.30	Optimize logo antenna performance
2025.08.01	DOE structure introduction
2025.08.04	DOE6---DOE8 study
2025.08.06	DOE9---DOE10 study
2025.08.18	DOE11 add copper tape on display back side
2025.08.25	Update radiation pattern and peak gain
2025.09.10	EVT antenna performance and do DOE12 to study new display affection
2025.09.11	do DOE13 to study low band performance of bottom antenna
2025.09.12	Update horizontal performance in DOE13
2025.09.18	do DOE14 to study new Hodor logo affection
2025.10.20	Update Logo antenna and bottom antenna with 1.6pF based on EVT unit
2025.10.21	do DOE15 to study antenna performance after removing copper tape on main board
2025.11.28	Update radiation and antenna dimension based on the data of 10.20 and 10.21

Manufacturer & Site	Shanghai Amphenol Airwave Communication Electronics Co.,Ltd Located at No. 689 Shennan Road, Minhang District, Shanghai, PR China 201108
Antenna Type	FPC Antenna, Dipole Antenna

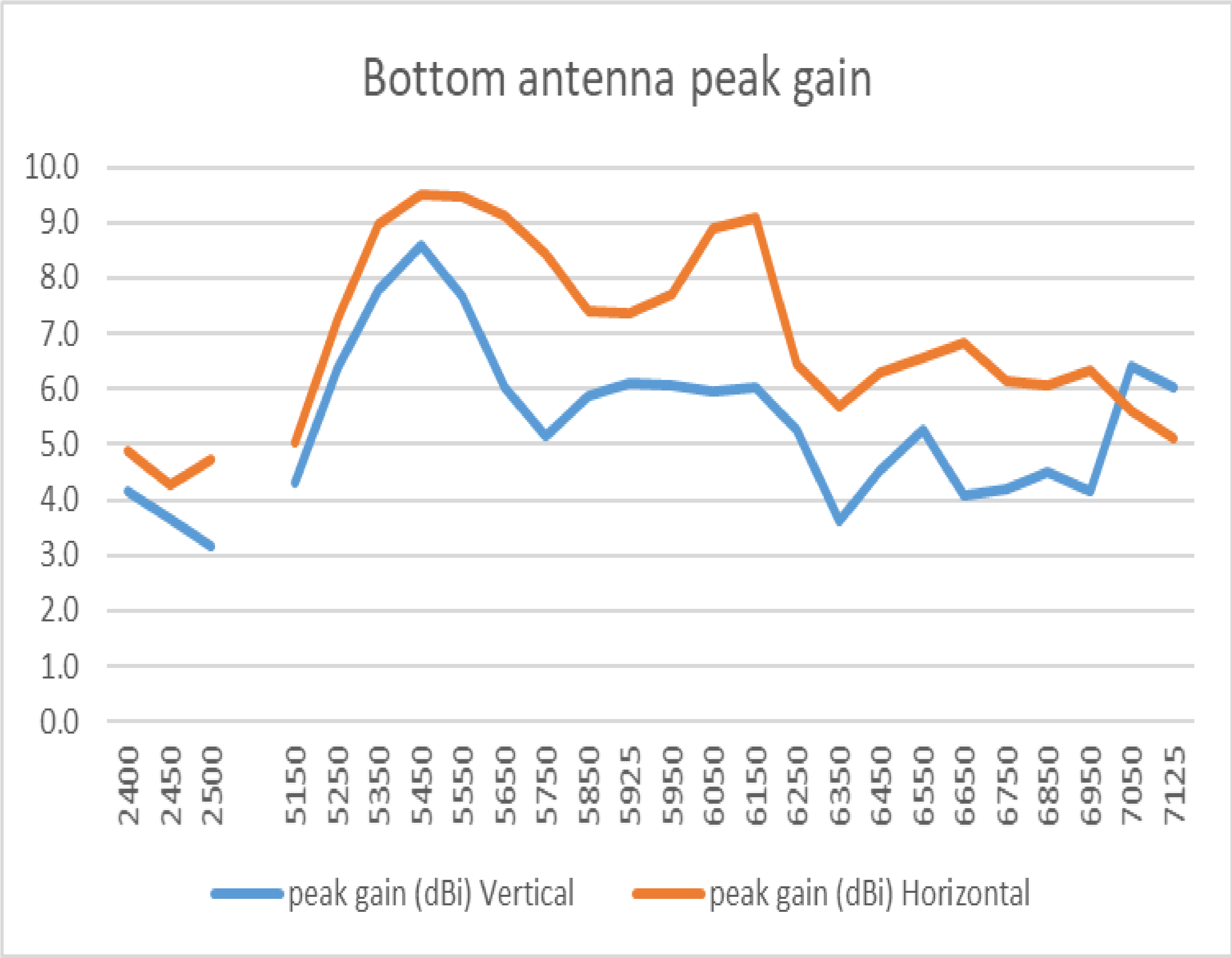
Amphenol | ANT2 antenna peak gain

Fre.(MHz)	peak gain (dBi) Vertical	peak gain (dBi) Horizontal
2400	2.9	4.2
2450	2.4	4.0
2500	2.3	3.4
5150	5.2	8.4
5250	5.2	8.6
5350	5.3	8.3
5450	5.2	8.1
5550	5.8	8.2
5650	5.5	7.8
5750	5.4	7.7
5850	5.5	7.6
5925	5.0	7.2
5950	4.9	7.0
6050	4.4	7.1
6150	4.4	7.3
6250	5.1	7.3
6350	5.1	7.1
6450	4.3	6.5
6550	4.2	6.2
6650	4.3	6.4
6750	4.5	6.8
6850	4.8	6.8
6950	4.2	6.9
7050	4.8	7.7
7125	6.1	7.7



Amphenol | ANT1 peak gain

Fre.(MHz)	peak gain (dBi) Vertical	peak gain (dBi) Horizontal
2400	4.2	4.9
2450	3.6	4.3
2500	3.2	4.7
5150	4.3	5.0
5250	6.4	7.3
5350	7.8	9.0
5450	8.6	9.5
5550	7.7	9.5
5650	6.0	9.1
5750	5.1	8.5
5850	5.9	7.4
5925	6.1	7.4
5950	6.1	7.7
6050	5.9	8.9
6150	6.0	9.1
6250	5.3	6.5
6350	3.6	5.7
6450	4.5	6.3
6550	5.3	6.6
6650	4.1	6.8
6750	4.2	6.1
6850	4.5	6.1
6950	4.2	6.4
7050	6.4	5.6
7125	6.0	5.1



Thanks